



PATENT APPLICATION  
MP1454-US10

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

GRAVES ET AL

Application No. 10/721,478

Filed: November 25, 2003

For: ELECTRICAL DEVICES

) Group Art Unit: 2832

)

) Examiner: Tu Ba Hoang

)

) TYCO ELECTRONICS CORPORATION

) 307 Constitution Drive

) Menlo Park, CA 94025

)

) August 18, 2006

REQUEST FOR CONTINUED EXAMINATION

and

DISCLOSURE STATEMENT UNDER 37 CFR § 1.56

Mail Stop RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

A Notice of Allowance for claims 21 to 23 and 25 was mailed May 18, 2006. The issue fee is not being paid and a Request for Continued Examination (RCE) is being filed in order to bring art to the attention of the Examiner. Any necessary fees should be charged or credited to Deposit Account No. 18-0560. Reconsideration, re-examination, and allowance are respectfully requested in view of the Remarks below.

Disclosure Under 37 CFR § 1.56

In fulfilling the duty of candor and good faith, the following documents are hereby disclosed to the Patent Office in accordance with 37 CFR § 1.56. It is not admitted that the information in the listed documents is material to patentability as defined in 37 CFR § 1.56(b). The Examiner is requested to consider the documents in the examination of this application.

CERTIFICATE OF MAILING UNDER 37 CFR §1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below:

Name of person signing certificate: Marquerite E. Gerstner

Signature: Marquerite E. Gerstner

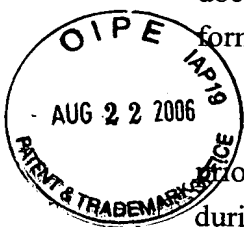
Date: August 18, 2006

Accompanying this statement is a Form PTO-1449 in duplicate on which the documents are listed. The Examiner is requested to return an initialed and signed copy of the form once the documents have been considered.

The following documents were cited during the prosecution of one or more of the priority applications for this application. In particular, the following documents were cited during the prosecution of U.S. Application No. 09/181,028, which is the parent application for this continuation application.

## U.S. PATENTS

| <u>Document Number</u> | <u>Date</u> | <u>Name</u>           | <u>Class</u> | <u>Subclass</u> |
|------------------------|-------------|-----------------------|--------------|-----------------|
| 2,482,316              | 09/20/1949  | Bocking               | 338          | 118             |
| 3,221,145              | 11/30/1965  | Hager, Jr.            | 219          | 549             |
| 3,351,882              | 11/07/1967  | Kohler et al.         | 338          | 322             |
| 3,435,399              | 03/25/1969  | Gielisse et al.       | 338          | 22R             |
| 3,497,859              | 02/24/1970  | Bang                  | 338          | 309             |
| 3,648,364              | 03/14/1972  | Endo                  | 29           | 620             |
| 3,775,725              | 11/27/1973  | Endo                  | 338          | 262             |
| 3,835,434              | 09/10/1974  | Kahn                  | 338          | 22R             |
| 4,088,828              | 05/09/1978  | Yamamoto et al.       | 174          | 263             |
| 4,200,970              | 05/06/1980  | Schonberger           | 29           | 593             |
| 4,237,441              | 12/02/1980  | van Konynenburg et al | 338          | 22R             |
| 4,238,812              | 12/09/1980  | Middleman et al       | 361          | 106             |
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| 4,272,471              | 06/09/1981  | Walker                | 264          | 104             |
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|           |            |                        |     |       |
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| 4,724,417 | 02/09/1988 | Au et al               | 338 | 22 R  |
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| 4,757,581 | 07/19/1988 | Yamada et al.          | 29  | 25.35 |
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| 4,780,598 | 10/25/1988 | Fahey et al            | 219 | 511   |
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| 31 22 612       | 12/23/1982 | Germany        | H01C  | 17/06     |
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| 38 39 868       | 06/08/1989 | Germany        | H01C  | 7/02      |
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| WO 95/08176     | 03/23/1995 | International  | H01C  | 1/14      |
| WO 95/31816     | 11/23/1995 | International  | H01C  | 1/14      |
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| 5-29111         | 02/05/1993 | Japan          | H01C  | 7/12      |

## OTHER DOCUMENTS

| <u>Details of Document</u>  |
|---|
| Coombs, <u>Printed Circuit Handbook</u> , 1996, p. 24.1-24.17.  |
| Harper, <u>Electronic Packaging and Interconnection Handbook</u> (1991), p. 1.37-1.43, 8.3-8.5, 8.53-8.56, 9.1-9.16, 9.41-9.49. |
| Standler, <u>Protection of Electronic Circuits from Overvoltages</u> , 1989, p. 133.  |
| U.S. patent application Ser. No. 07/893626 (Chandler et al.), filed Jun. 5, 1992.   |
| "Protection of Batteries with PolySwitch.RTM. Devices", Raychem Corporation, Jan., 1987.  |
| Search Report for International Application No. PCT/US93/06480, dated Oct. 7, 1993.   |
| Search Report for International Application No. PCT/US94/10137, dated Nov. 23, 1994.  |
| Search Report for International Application No. PCT/US95/05567, dated Jun. 26, 1995.  |
| Search Report for International Application No. PCT/US95/07420, dated Sep. 4, 1995.   |
| "PolySwitch PTC Devices, Standard Product List", Raychem Corporation, May 1992.   |
| "PolySwitch SMD Surface Mount devices PTC overcurrent protection" trade brochure, Raychem Corporation, Nov. 1992.               |
| "PolySwitch SMD Installation Guidelines" trade brochure, Raychem Corporation, Nov. 1992.  |

Copies of Documents

In accordance with 37 CFR §1.98(d), copies of the documents submitted by Applicants during the prosecution of the parent application are not being submitted. In accordance with the Official Gazette Notice dated July 11, 2003, waiving the requirement under 37 CFR § 1.98(a)(2)(i) for submitting a copy of each cited U.S. patent and each cited U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003, any copies of the remaining documents (e.g. documents cited by the Examiner during prosecution, which were U.S. patents), are not being sent. All of these documents are, however, listed on the accompanying Form PTO-1449, and Applicants will readily supply copies if needed.

Additional Prior Art

The present application draws priority from Application No. 08/302,138 (filed September 7, 1994; docket no. MP1454-US3), which is a continuation-in-part of two applications: Applications Nos. 08/152,070 (filed November 12, 1993; docket no. MP1454-US2) and 08/121,717 (filed September 15, 1993; docket no. MP1490-US1). Application No. 08/152,070 is itself a file wrapper continuation of Application No. 07/910,950 (filed July 9, 1992; docket no. MP1454-US1).

For purposes of this examination only, Applicants ask the Examiner to consider that electrical devices as set forth in Figures 1 and 2 of Application No. 07/910,950 (which are very similar to Figures 9 and 10 of the present application) may have been publicly shown and/or sold after the filing date of Application No. 07/910,950 but more than one year prior to the filing date of Application No. 08/121,717. Nonetheless, Applicants believe that the claimed invention is patentable over these devices. Independent claims 21 to 23 and 25 of the present application recite the presence of apertures or transverse conductive members positioned within apertures passing through the thickness of a PTC element. Such conductive members are neither disclosed nor suggested by the devices of Figures 1 and 2 of Application No. 07/910,950.

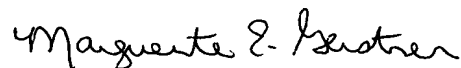
Applicants explicitly do not admit that these prior art devices are prior art for any purpose except for the purpose of ex parte prosecution of this application. For example, Applicants make no such admissions for the purposes of any inter partes proceedings involving this application or any ex parte or inter partes proceedings involving any patent issued on this application or any reexamination or reissue thereof, or any ex parte or inter partes proceedings involving any divisional, continuation, or continuation-in-part application of this application or any patent granted on such a continuing application.

Because the above information, which is not in the form of a document, does not fit the format of a Form PTO-1449, the Examiner is requested to indicate in writing that he has considered this information in his examination of this application.

### Conclusion

It is believed that this application is now in condition for allowance and such action at an early date is earnestly requested. If, however, there are any outstanding issues which can be usefully discussed by telephone, the Examiner is asked to call the undersigned.

Respectfully submitted,



Marguerite E. Gerstner  
Registration No. 32,695  
Telephone (650) 361-2483

FORM PTO-1449  
(Rev 8/83)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

Atty. Docket No.:

Appl'n No.:

MP1454-US10

10/721,478

Applicant:

Graves et al.

Filing Date:

Nov. 25, 2003

Group:

2832

## INFORMATION DISCLOSURE STATEMENT

Use several sheets if necessary)

## US PATENT DOCUMENTS

| * Exr.<br>initial | Document<br>number | Date       | Name                  | Class | Sub-<br>class |
|-------------------|--------------------|------------|-----------------------|-------|---------------|
|                   | 2,482,316          | 09/20/1949 | Bocking               | 338   | 118           |
|                   | 3,221,145          | 11/30/1965 | Hager, Jr.            | 219   | 549           |
|                   | 3,351,882          | 11/07/1967 | Kohler et al.         | 338   | 322           |
|                   | 3,435,399          | 03/25/1969 | Gielisse et al.       | 338   | 22R           |
|                   | 3,497,859          | 02/24/1970 | Bang                  | 338   | 309           |
|                   | 3,648,364          | 03/14/1972 | Endo                  | 29    | 620           |
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|                   | 3,835,434          | 09/10/1974 | Kahn                  | 338   | 22R           |
|                   | 4,088,828          | 05/09/1978 | Yamamoto et al.       | 174   | 263           |
|                   | 4,200,970          | 05/06/1980 | Schonberger           | 29    | 593           |
|                   | 4,237,441          | 12/02/1980 | van Konynenburg et al | 338   | 22R           |
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|                   | 4,486,738          | 12/04/1984 | Sadlo et al.          | 338   | 320           |
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|                   | 4,534,889          | 08/13/1985 | van Konynenburg et al | 252   | 511           |

Examiner's signature

Date considered

\* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

|  |                   |             |
|--|-------------------|-------------|
| <b>FORM PTO-1449</b><br>(Rev 8/83)<br><br><b>U.S. DEPARTMENT OF COMMERCE</b><br><b>PATENT AND TRADEMARK OFFICE</b><br><br><b>INFORMATION DISCLOSURE STATEMENT</b><br><br>(Use several sheets if necessary) | Atty. Docket No.: | Appl'n No.: |
|  | MP1454-US10       | 10/721,478  |
|  | Applicant:        |             |
|  | Graves et al.     |             |
|  | Filing Date:      | Group:      |
|  | Nov. 25, 2003     | 2832        |

**US PATENT DOCUMENTS (continued)**

|           |            |                        |     |       |
|-----------|------------|------------------------|-----|-------|
| 4,545,926 | 10/08/1985 | Fouts et al            | 252 | 511   |
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|                      |                 |
|----------------------|-----------------|
| Examiner's signature | Date considered |
|----------------------|-----------------|

\* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



|   |  |  |                                  |                           |
|---|--|--|----------------------------------|---------------------------|
| FORM PTO-1449<br>(Rev 8/83)<br><br><b>INFORMATION DISCLOSURE STATEMENT</b><br><br>(Use several sheets if necessary) | U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE |  | Atty. Docket No.:<br>MP1454-US10 | Appl'n No.:<br>10/721,478 |
|   | Applicant:<br>Graves et al.                                |  |                                  |                           |
|   | Filing Date:<br>Nov. 25, 2003                              |  | Group:<br>2832                   |                           |
|   |  |  |                                  |                           |
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**US PATENT DOCUMENTS(continued)**

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